

## ABSTRACT OF THE DISCLOSURE

Disclosed is a dispersion shifted fiber, which has zero dispersion wavelength on a long wavelength side beyond 1640 nm, a wavelength dispersion of -1.0 to -10.0 ps/nm/km at a wavelength range of 5 1530-1625 nm, a dispersion slope of less than 0.07 ps/nm<sup>2</sup>/km, a polarization mode dispersion of not more than 0.1 ps/(km)<sup>1/2</sup> at a wavelength of 1550 nm, and a core cross-sectional area of 40-70 μm<sup>2</sup> at the wavelength of 1550 nm.